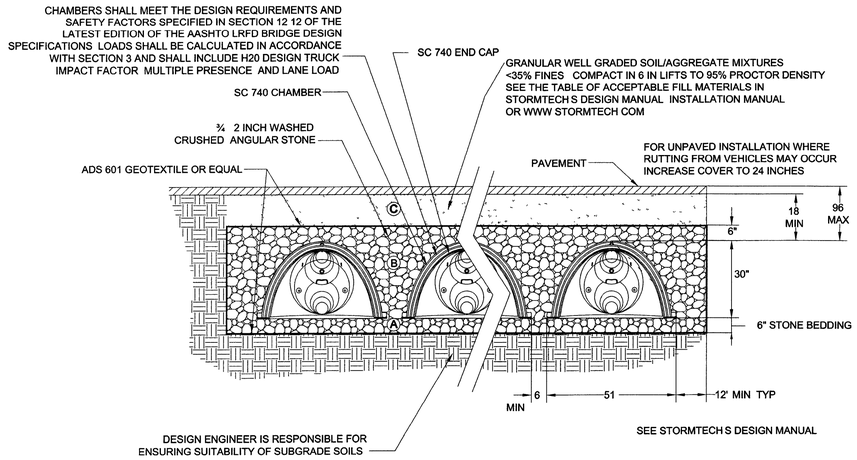
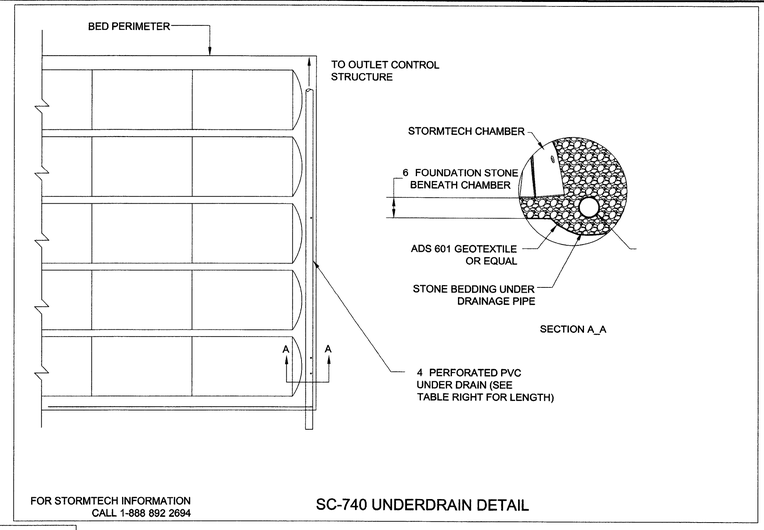




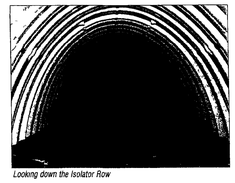
13 0 Inspection & Maintenance

13 4 ISOLATOR™ ROW INSPECTION

Regular inspection and maintenance are essential to assure a properly functioning stormwater system Inspection is easily accomplished through the manhole or optional inspection ports of an Isolator Row Please follow local and OSHA rules for a confined space entry

Inspection ports can allow inspection to be accomplished completely from the surface without the need for a con fined space entry Inspection ports provide visual access to the system with the use of a flashlight A stadia rod may be inserted to determine the depth of sediment If upon visual inspection it is found that sediment has accumulated to an average depth exceeding 3 (76 mm) cleanout is required

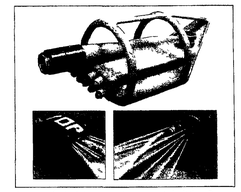
A StormTech Isolator Row should initially be inspected immediately after completion of the site s construction While every effort should be made to prevent sediment from entering the system during construction it is during this time that excess amounts of sediments are most likely to enter any stormwater system Inspection and maintenance if necessary should be performed prior to passing responsibility over to the site s owner Once in normal service a StormTech Isolator Row should be inspected bi-annually until an understanding of the sites characteristics is developed The site s maintenance manager can then revise the inspection schedule based on experience or local requirements

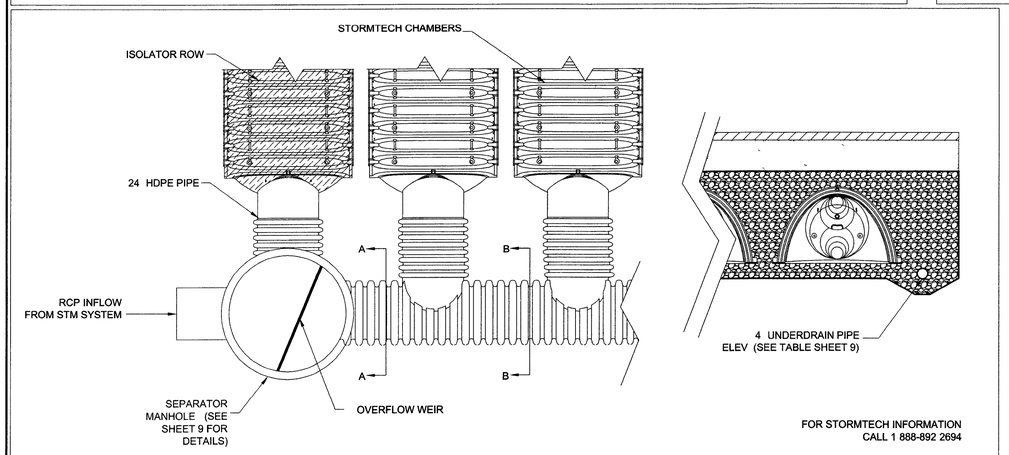

Looking down the Isolator Row

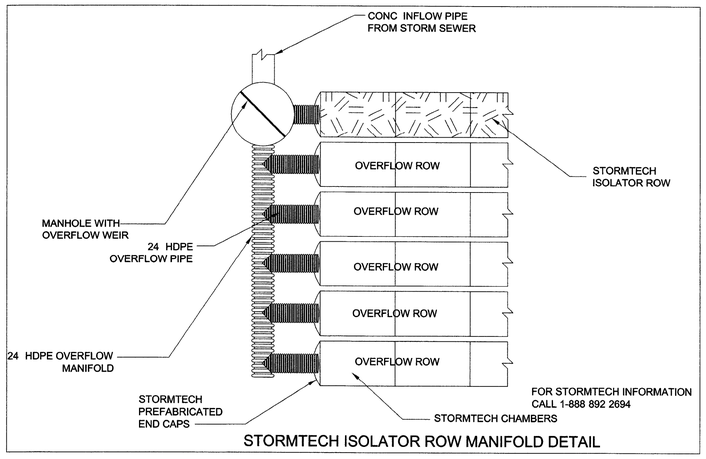

A typical JetVac truck (This is not a StormTech product)

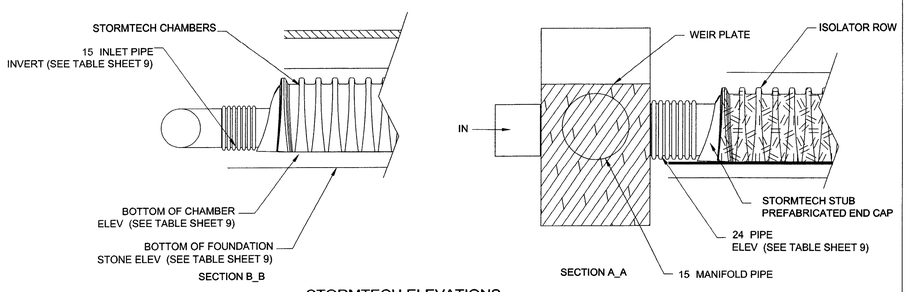
13 5 ISOLATOR ROW MAINTENANCE

JetVac maintenance is required if sediment has been col lected to an average depth of 3 (76 mm) or more inside the Isolator Row The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments As the nozzle is retrieved a wave of suspended sediments is flushed back into the manhole for vacuuming Most sewer and pipe maintenance companies have vacuum/ JetVac combination vehicles Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable Rear facing jets with an effective spread of at least 45 (1140 mm) are best Most JetVac reels have a mini mum of 400 feet (122 m) of hose allowing maintenance of an Isolator Row up to 50 chambers long The JetVac process shall only be performed on StormTech Rows that have AASHTO class 1 woven geotextile over their angular base stone


Examples of culvert cleaning nozzles appropriate for Isolator Row maintenance (These are not StormTech products)





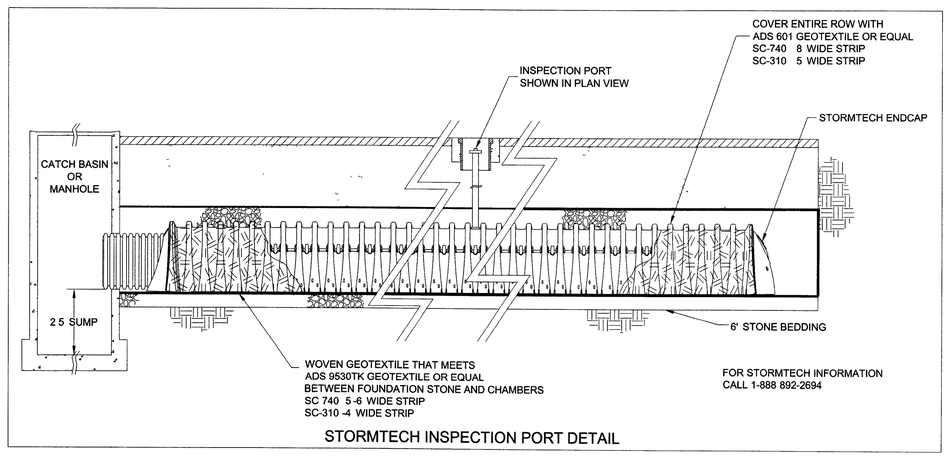


ACCEPTABLE FILL MATERIALS
STORMTECH SC 740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18 TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS NATIVE SOILS OR PER ENGINEER S PLANS CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS	N/A	N/A	PREPARE PER ENGINEER S PLANS PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS
Ⓒ FILL MATERIAL FOR 6 TO 18 ELEVATION ABOVE CHAMBERS (24 FOR UNPAVED INSTALLATIONS)	GRANULAR WELL GRADED SOIL/AGGREGATE MIXTURES <35% FINES	3 357 4 467 5 56 57 6 67 68 7 78 8 89 9 10	A 1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12 000 LBS DYNAMIC FORCE NOT TO EXCEED 20 000 LBS
Ⓑ EMBEDMENT STONE SURROUNDING AND TO A 6 ELEVATION ABOVE CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN ¾ 2 INCH	3 357 4 467 5 56 57	N/A	NO COMPACTION REQUIRED
Ⓐ FOUNDATION STONE BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN ¾ - 2 INCH	3 357 4 467 5 56 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

PLEASE NOTE THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY THE STONE MUST ALSO BE WASHED CRUSHED ANGULAR FOR EXAMPLE THE STONE MUST BE SPECIFIED AS WASHED, CRUSHED, ANGULAR NO 4 STONE

NOTES
1 ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL
2 THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS
3 THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION CALL **1-888-892 2694** OR VISIT **WWW STORMTECH COM** TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS
4 CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND SAFETY FACTORS SPECIFIED IN SECTION 12 12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS LOADS SHALL BE CALCULATED IN ACCORDANCE WITH SECTION 3 AND SHALL INCLUDE H20 DESIGN TRUCK IMPACT FACTOR MULTIPLE PRESENCE AND LANE LOAD



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Chantilly Virginia 20151
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Bury+Partners-VA Inc

MIDDLEBURG VOLUNTEER FIRE DEPARTMENT BUILDING ADDITION
FINAL SITE PLAN
BLUE RIDGE DISTRICT
TOWN OF MIDDLEBURG, VIRGINIA

SWM/BMP Facility Details

NO	REVISION	DATE
1	REMOVED MEETING HALL	5 2 08
2	REV 2ND REVIEW COMMENTS	7 10 08

COMMONWEALTH OF VIRGINIA
WILLIAM D HUME
No 0037880
7/10/08
PROFESSIONAL ENGINEER

SCALE N/A
DATE 11-16-07
DRAWN BY PJC/BP
DESIGNED BY PJC
REVIEWED BY MS
PROJ NO 220550002

SHEET 9 OF 18